

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Tesluk, Chris Examiner: Andrew J. Rost
Serial No.: 10/784,639 Art Unit: 3751
Filed: February 23, 2004 Confirmation No.: 8172
For: **Fluid Conduit Connector Apparatus**

CERTIFICATE OF TRANSMISSION

I hereby certify that this response for a total of 9 pages is being sent to the USPTO via facsimile to (571) 273-8300 or via electronic transmission by Private PAIR on the date shown below to: **Mail Stop Amendment**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

By: Julie D. Parker Date: January 17, 2008
Julie D. Parker

NON-FINAL REJECTION

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner Rost:

In response to your Office Action dated September 4, 2007,
please find our response below. Please consider the following
remarks starting at page 5. The amended claims start on page 3.

WHAT IS CLAIMED IS:

1. (Previously Presented) A fluid connector apparatus adapted for use with a compression apparatus, the fluid connector apparatus comprising:

5 a first connector and a second connector, the fluid connector apparatus further having a first position and a second position, both positions allow for fluid flow therethrough a fluid orifice located at the first connector;

10 the second connector is releasably attached to the first connector, at a proximal end of the orifice of the first connector, wherein the fluid orifice further includes a single valve disposed in the fluid orifice;

15 in the first position the single valve is in a substantially open position by the second connector for allowing fluid flow from the compression apparatus to a compression sleeve; and

20 in the second position the second connector is detached from the first connector, the single valve advances in a proximal direction to a closed position in the fluid orifice, the single valve substantially reducing but not closing the fluid orifice to fluid flow therethrough for approximating the

pneumatic behavior of the detached compression sleeve at the second connector.

2. through 6 (Canceled)

7. (Previously Presented) The fluid connector apparatus
5 according to claim 1 wherein said first connector includes a cap portion disposed therein and said valve engages said cap portion for limiting the travel of the valve.

8. (Canceled)

9. (Previously Presented) The fluid connector apparatus
10 according to claim 1 wherein said second connector includes a locking arm extending therefrom such that said locking arm is adapted to releasably retain said first connector with said second connector.

10. (Previously Presented) The fluid connector apparatus
15 according to claim 9 wherein said first connector includes a slot for engaging said locking arm.

11. (Canceled)

12. (Previously Presented) The fluid connector apparatus
20 according to claim 1, wherein said second connector includes an engagement portion extending therefrom and said valve is

displaced by said engagement portion when said second connector is mated to said first connector.

13. through 20. (Canceled)

21. (Previously Presented) The fluid connector apparatus
5 according to claim 1, wherein the valve has a biasing member comprising at least one of the following: a spring, a plastic cantilever spring arm, and a elastometric material forming a gasket.

22. (Previously Presented) The fluid connector apparatus
10 according to claim 21, wherein the valve is biased substantially open in the first position.

23. (Previously Presented) The fluid connector apparatus according to claim 1, wherein at least one of the orifice and the valve has a slot therein.

15 24. (Previously Presented) The fluid connector apparatus according to claim 1, wherein the valve further includes a plunger and a valve seat having at least one slot.

25. (Withdrawn)

Response to the non-Final Office Action dated September 4, 2007

Overview

In response to the 102(b) rejection, the Applicant elects
5 to traverse independent claim 1.

In response to paragraph 5, the Applicant confirms the
subject matter of the claims is commonly owned.

10 **Response to the 102(b) Rejection.**

This non-final action rejected claims 1, 7, 9, 10 and 21-24
as being anticipated by Hopson (5,881,769).

Applicant elects to traverse independent claim 1. The
15 Applicant respectfully avers that the Examiner has not met his
burden of establishing the prima facie case for anticipation.
This standard is partly stated in W.L. Gore & Assoc.,
"[a]nticipation requires the disclosure in a single prior art
reference of each element of the claim under consideration." See
20 W.L. Gore & Assocs. V. Garlock, 721 F.2d 1540 (Fed. Cir. 1983).
Furthermore, "[a]nticipation requires the presence in a single
prior art reference disclosure of each and every element of the
claimed invention, arranged as in the claim." See Lindemann
Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d
25 1452 (Fed. Cir. 1983). Lastly, "[u]nder 35 U.S.C. section 102,
anticipation require that . . . the prior art reference must be
enabling, thus, placing the allegedly disclosed matter in the
possession of the public." See Scripps Clinic & Research Found.
V. Genentech Inc., 927 F.2d 1565 Fed. Cir. 1991). Thus, the
30 "anticipating reference must describe the patent subject matter
with sufficient clarity and detail to establish that the subject

matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention." See *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534 (Fed. Cir. 1998).

The prima facie case for anticipation requires 1) a single reference, 2) that teaches or enables, 3) each of the claimed elements (arranged in the claim, including functional results), 4) expressly or inherently, and 5) as interpreted by one of ordinary skill in the art.

The Applicant respectfully avers, the Examiner has not met element 3 to establish a prima facie case of anticipation.

Hopson '769 does not allow flow through its bleed ports 31 when the first adaptor 8 and second adaptor 9 are disconnected. By contrast, in the instant application the connector is disconnected in a second position, and flow continues through the valve seat. This allows the closed valve to simulate the pneumatic characteristic of the detected compression sleeve bladder ("functional behavior"). This functional behavior is not disclosed in Hopson '769.

The Applicant respectfully avers the Examiner has not met element 2 to establish a prima facie case of anticipation. See *In re Donohue*, 632 F.2d 123 (C.C.P.A. 1982).

Hopson '769 does not teach or enable the instant application. Hopson '769 may disclose some of the claim elements, but Hopson is non-enabling. The functional behavior is not taught or enabled in Hopson '769 because when disconnected there is no flow through the Hopson bleed ports 31. There is no flow available because the function of Hopson '769 is to provide flow back through the bleed ports 31, to equalize the pressure across the valve, prior to disconnection. As the Hopson '769 title and abstract describe, the connector or breakaway coupler 28 relieves pressure after fueling or flow is complete, back through the ports 31. This is to allow adaptor 8

and 9, which form the connector, to be separated easily. Hopson '769 is teaching and enabling a pneumatic activation of its valve 15 when the flow through adaptor 9 opens the valve 15, which when adaptor 8 and 9 are connected, is under the force of a spring 22. By contrast, the present invention is claiming a mechanical activation of a valve (76) by a spring (82), which when activated by the separation of a coupling port (36) and a coupling fitting (40), the spring biases the valve closed. In a closed or second position, as claimed, the valve (76) still allows flow to occur therethrough. Hopson '769 is not teaching flow through the valve when adaptor 8 and 9, that form the breakaway coupler are disconnected.

The Applicant respectfully avers that Hopson '769 is not anticipating for the reasons stated above.

Response to 103(a) Rejection

In response, the Applicant restates its previous argument against Summerville. The Applicant will traverse the 103(a) rejection. A prima facie case of obviousness is established when the Examiner provides 1) one or more references, 2) that were available to the inventor and 3) that teach, 4) a suggestion to combine or modify the references, 5) and the combination or modification of which would appear to be sufficient to have made the claimed invention obvious to one of ordinary skill in the art.

The claimed invention must be considered as a whole and the instant claim is not to be used as an instruction manual to find the combination of cited references provides the motivation or suggestion to combine the references. In examining the claim as a whole, the function behavior of the claimed invention is found in the combined references. The Office Action characterizes the

claimed invention as "[i]n order to provide a condition for preventing valve member locking due to excess pressure." The present invention is not claiming to prevent valve member locking to relieve pressure, but to allow flow when the couplers (36, 40) are disconnected, as claimed:

in the second position the second connector is detached from the first connector, the single valve advances in a proximal direction to a closed position in the fluid orifice, the single valve substantially reducing but not closing the fluid orifice to fluid flow therethrough for approximating the pneumatic behavior of the detached compression sleeve at the second connector.

Fross '131 teaches, as the Office Action pointed out, "The poppet assembly includes a poppet 87 having an axial bleed port 89, a poppet retainer 91 mounted in bore 85, and a spring 93 therebetween for biasing poppet 87 to the right against a seat at the right end of bore 89. Bleed port 89 prevents poppet 87 from sealing the right end of bore 85." This is shown in operation in figures 3-5. In Fross' disconnected position, as described above, there is no suggestion or motivation, or need, for flow through bleed port 89. The claim taken as a whole has flow therethrough "for approximating the pneumatic behavior of the detached compression sleeve at the second connector." See Independent Claim 1.

The Applicant respectfully avers, the Examiner has not met element 4, thus has not made the prima facie case for obviousness when the instant application is needed to motivate one to use the axial bleed port 89 in the poppet 87.

Next, the combination creates an inoperable device, that is, a device that can not function as the claimed invention when taken as a whole. The Applicant respectfully avers, the Examiner has not met element 3, thus has not made the prima facie case for obviousness when the proposed combination makes the Summerville reference inoperable for its intended purpose. See *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (finding no suggestion to modify a prior art device where the modifications would render the device inoperable for its intended purpose.)

The Applicant asserts its previous arguments made in early response that Summerville operates automatically to fluid-seal the two parts of the coupling, when the coupling is disengaged. Summerville's valve members 25 will simultaneously close automatically so as to seal off the fluid supply. (3:24-26). Applying the teachings of the Fross poppet assembly with its axial bleed pot 89 to replace the valve head member 25 of Summerville, the Summerville valve 25 will leak fluid at 29-30. This is not the intended operation of Summerville. Summerville teaches that it is "absolutely necessary that the conduit member 40 be pulled downward . . . and an upward pull of member 40 is absolutely resisted by the coupling device." (3:3-45).

The Applicant respectfully avers the Examiner has not demonstrated obviousness in failing to meet elements 3 and 4 of the required prima facie case. See *Graham*, 383 U.S. 1.

The Applicant respectfully reminds the Examiner that the invention must be taken as a whole according to 35 U.S.C. 103(a). The Applicant respectfully suggests when its invention is taken as a whole as claimed, the cited references do not show or teach fluid flow through an orifice when the fluid connector apparatus is disconnected.

Closing

5 The Applicant respectfully requests allowance of the
amended independent claim 1 and the dependent claims 7, 9, 10
12, and 21-24 depending directly or indirectly from amended
independent claim 1.

10 Applicant respectfully requests an Examiner interview, if
the above amendments do not place this application in condition
for allowance. Applicant petitions for any extension necessary
to maintain the pendency of this case, and the Applicant further
authorizes the Commissioner of Patents to charge Deposit Account
Number 190254 for any late fees or charges necessary to avoid
15 abandonment of this case. I can be reached direct at (508) 261-
8476 or Edward.jarmolowicz@covidien.com.

Respectfully yours,

20 

Edward S. Jarmolowicz, Reg. No. 47,238
Attorney for the Applicant
Tyco Healthcare Group LP d/b/a Covidien
15 Hampshire Street
25 Mansfield, Massachusetts 02048